

long-distance competition even though, in all respects other than price structure, it is less efficient than the other carriers.²⁷

B. Regulatory imputation cannot prevent the competitive problems arising from access price distortions.

32. First of all, regulatory “imputation,” as conventionally practiced, only sets a low price floor on the LECs’ service offerings to prevent blatant predatory pricing. As such, it does not and cannot address the competitive advantages described above that LECs will obtain in long-distance service so long as regulated access prices remain far above cost. In each of the cases described above, conventional regulatory imputation, even if perfectly administered (which is often far from the case) will not eliminate the LEC’s competitive advantage. As the only competitor whose private access costs are the true, and very low, marginal costs, the LEC will have a competitive advantage unrelated to its efficiency as a long-distance carrier, and it will not need to price predatorily (and possibly violate the regulator’s imputation standard) to realize the benefits of this advantage.²⁸

²⁷The argument that it is better for the LEC alone to price efficiently than for no one to price efficiently is not compelling. If some protectionist states began enacting laws that allowed only the LECs to use digital switches, while limiting everyone else to analogue switches, would anyone be inclined to accept the argument that the BOCs in those states should be allowed into long distance so that consumers could get the benefits of digital switching? We think not. Regulatory favoritism that limits deployment of more efficient business practices only to the favored LECs, whether it involves efficient switches or efficient price structures, is both perverse and anticompetitive.

²⁸We are not suggesting that perfect regulation could not solve the problem. By definition, perfect regulation can optimally solve any problem. However, in this context perfect regulation would require, at a minimum, that to correct the artificial competitive advantage associated with

33. Second, even if properly defined and enforced, an imputation standard is often nothing more than an internal accounting or bookkeeping measure. For an ILEC, imputing access charges means only that money is going from one pocket into the other. In contrast, for an IXC, paying access charges means that money goes from the IXC to the ILEC. Imputation does not change an integrated firm's profit maximizing strategy in circumstances where, such as described above, the imputation price constraints are not violated. In those circumstances, imputation provides no practical protection to competitors against the competitive advantages LECs will have in pricing long-distance services.

34. Third, imputation is difficult to define and enforce. Proper imputation studies require that the ILEC service be carefully defined so that the precise elements of access can be properly imputed. Moreover, enforcement is always a practical problem. Competitive harm occurs as soon as an ILEC begins to offer the service. After the fact determinations that an ILEC service fails an imputation standard, months or years after the ILEC begins offering the service, does not help unless regulators award multiple damages to all rivals whose business was harmed. That is something they have generally not done. With more and more toll offerings, the battles over imputation will become more and more complex.

nonlinear pricing, the imputation test must be applied customer by customer and tariff element by tariff element. Even if attempted, such customer and element-specific regulation would be extremely expensive and, to say the least, is not likely to be administered perfectly.

C. Access “reform” that is limited to allowing market forces to operate in the local exchange is a highly imperfect remedy. Access prices should be prescriptively reduced to economic cost.

35. The “market” approach to access reform relies on increasing local competition to gradually bring access charges down to cost. There are two problems with this approach. First, even for originating access, this process may well require a very substantial degree of local competition. The initial entrants into the local exchange markets, faced with limitations on their ability to expand capacity or increasing costs for more rapid expansion, may well not immediately bid down per unit prices for originating access. Given the very high current access profit margins and only a small, gradual, and localized loss of market share, the ILECs cannot be expected to respond with widespread cuts in originating access prices. The expected outcome does not change significantly if the LECs are allowed to de-average access prices on a very localized basis. While the local price reductions may be larger and more immediate, originating access prices will not be bid down on a widespread basis until local competition is geographically widespread, since the LEC will only cut prices where it faces actual competition.

36. Second, given current institutional arrangements for retail telephone pricing, local competition will affect terminating access charges only very slowly. The customer, when choosing its local carrier, also chooses the carrier who will carry its terminating access, in which case the local carrier “owns” the customer for termination. That “ownership” creates incentives to charge high terminating access prices, since the calling customer pays the entire cost of the call, even when competing facilities are physically able to terminate calls. As a result, competition will

likely affect market-based terminating access charges more slowly than it will affect prices for originating access. The FCC's recent access charge order proposes reducing terminating access charges to 1.2 cents per minute. While this is a step in the right direction, even the 1.2 cents per minute charge is well above the economic cost of providing terminating access.

IV. LOCAL COMPETITION

A. The role of effective local competition in preventing competitive abuses.

37. In the long-distance market, effective local competition can loosen Ameritech's current bottleneck control of essential facilities. To the extent effective local competition exists and to the extent interexchange carriers have the ability to influence the customer's choice of local providers (for example, by offering pricing plans that reflect reduced originating access charges), Ameritech's incentives to keep originating access rates high are reduced. Similarly, effective facilities-based local exchange competition would reduce Ameritech's incentives to engage in other (non-price) activity that would raise the cost to interexchange carriers.

38. In the local markets, effective facilities-based competition means that new entrants are no longer solely or substantially dependent on Ameritech to provide local service in Michigan on a widespread basis. As a result, exclusionary behavior by Ameritech becomes less profitable and less likely, since exclusion is most profitable before the entrants have realized market acceptance sufficient to at least challenge the incumbent's market power.

B. The appropriate analytic standards for assessing local competition: how much local competition is enough to warrant allowing Ameritech into interLATA service?

39. Let us first define some terms. The term "facilities-based competition" in the local exchange market refers to competition from a supplier of local exchange services using its own (upstream) facilities. "UNE-based competition" in the local exchange market refers to competition from a supplier of local exchange services that purchases some of its upstream unbundled network elements from the LEC. "Resale" refers to competition in the local exchange market based on firms that purchase the LEC's local service at wholesale and resell that service to customers.

40. Resale competition by itself cannot provide effective local competition to Ameritech, and UNE-based competition has limited potential to provide fully effective local competition.

41. Resale is desirable for a number of reasons. In particular, resale inhibits price discrimination and thus reduces the ILEC's ability to fully exploit its market power at the upstream level (i.e., the wholesale, or UNE, stage). Resale may also facilitate eventual entry into the wholesale stage, by allowing entrants to establish a customer base before investing in their own facilities.²⁹ However, resale has no immediate effect on the ILEC's market power at the

²⁹Resale of AT&T's long-distance services during the early years of long-distance competition did serve this function -- MCI, and later Sprint, were able to serve customers on a nationwide basis before they had nationwide facilities themselves.

upstream level. Resale by itself is thus not an answer to concerns over wholesale market power.³⁰ Even if Ameritech lost all its retail sales to resellers but only to resellers, with no competition from facilities-based entry or from competitors relying primarily on unbundled network elements, Ameritech would retain its wholesale market power, since it would face absolutely no competition at the wholesale stage. Most states have been setting resale discounts at around 20% of the retail price, implying that resale competitors will not be competing against Ameritech for over 80% of the value added in local service.³¹

42. Resale on a widespread basis has little effect on an ILECs market power, so it would be especially inappropriate to view the mere possibility of future resale competition as a reason for concluding that Ameritech currently faces effective local competition. Resale may facilitate the development of local competition by allowing a new competitor to assemble an adequate customer base to warrant investing in its own facilities. That is the only way resale contributes to any local competition other than for retailing functions. If the wholesale discount turns out to be

³⁰Resale can help increase price competition at the wholesale stage when there are two or more wholesalers. Because resellers aggregate the demands of smaller customers, they can better negotiate low prices by threatening to take their combined volume of business elsewhere. A threat of this sort will not be credible in local telephone markets any time soon, however, since resellers, in almost all foreseeable circumstances, will have no other facilities-based supplier to which to turn as an alternative source of wholesale capacity.

³¹If the resale discount is 20%, resellers compete for considerably less than 20% of Ameritech's revenues from each customer, since Ameritech keeps access revenues even when a reseller captures the customer.

too low to allow resale competitors to gain much share, the process of moving from resale to facilities-based competition could be cut off in its incipiency.

43. Competition based on UNEs is critical but is not a solution to the problem of discrimination once BOCs that control upstream, bottleneck facilities are allowed into long distance. If the only meaningful competition to the LEC in the downstream local exchange market comes from competitors purchasing UNEs at prices constrained by regulation, then Ameritech's prices at retail will remain largely determined by regulation, not by market forces.³² As long as the prices for UNEs are constrained by regulation, Ameritech retains its incentive to evade regulation. Effective competition in the market for local exchange services would then require effective regulation in the market for upstream elements.

44. This is, however, easier said than done. Regulators have limited budgets, and it will be difficult for them to evaluate cost studies and claims of technical infeasibility. Even if we get to the point where customers and regulators agree that with today's technology the regulations are working well, one has to start all over again in developing regulatory benchmarks and other transaction criteria as technology changes. Thus, effective competition based on unbundled network elements is reversible. As discussed above, however, once allowed into interLATA long-distance service, Ameritech loses any incentive to cooperate with CLECs in developing

³²Even if retail prices fall below the maximum retail prices allowed by regulators, competition will only be setting the markup over the regulated price for unbundled network elements.

reasonable and nondiscriminatory terms for the sale of unbundled elements in the new vintage of technology. That is why the best evidence of local competition is actual, facilities-based entry. Once such investments have been made, the entrants are committed to the market for some period of time. And, because they control their own facilities, entrants and their customers are less susceptible to discrimination by the incumbent local monopolist.

45. In the absence of such facilities-based competition, regulation could be expected to be effective in controlling Ameritech's incentives to discriminate only if the transaction were standardized, not subject to significant technical change, and if there were natural benchmarks for reasonable performance and adequate enforcement mechanisms are in place.

46. Natural benchmarks might be derived from examining similar transactions where Ameritech had an incentive to complete the sale, as opposed to frustrate it. For example, it might turn out that the sale of unbundled loops will become a standardized transaction for a product that is expected to experience minimal technical change. If Ameritech's performance in provisioning unbundled loop service to customers it loses can be directly compared to its performance for customers it retains or recovers and if the IXC receives service comparable to that received today by a retail customer on new service orders, then natural benchmarks may be available.

47. Product standardization and the availability of natural benchmarks mean that regulators could, in principle, impose a reasonable set of performance criteria on Ameritech, and the

assumption of stable technology, if valid, implies that the beneficial effects of the initial regulations are more likely to be irreversible.³³ Even here, however, the regulator would have to detect and punish adoption by Ameritech of a contrived change in technology that would not have been adopted but for the fact that it would allow Ameritech to force its competitor-customers and regulators to start over in negotiating and regulating new performance criteria for the sale of unbundled elements. Thus, the set of circumstances where regulation can be relied upon to protect the competitive process appears limited and, therefore, UNE-based entry will probably not result in effective local competition.

C. Measuring effective local competition.

48. The framework for assessing market power and competition is provided by the modern economics of industrial organization. The mainstream view in industrial organization is sometimes referred to as the structure-conduct-performance paradigm. This paradigm provides the conceptual basis for the *Merger Guidelines*, which are used by federal antitrust authorities (and many federal courts) in analyzing mergers and other antitrust issues. The overall concepts for assessing the degree of market power or competition found in the *Guidelines* are applicable to assessing competition and market power issues quite generally, and not just in the context of a merger. The basic *Guidelines* framework is applicable to measuring effective competition for

³³Indeed, enormous welfare gains can be realized by government standard-setting, even where private firms, absent the government-imposed standard, would choose noncompatible, proprietary standards. The terminal equipment market became far more price competitive and exhibited far greater technological change after the FCC imposed standards that sharply reduced the ability of the Bell System to prevent interconnection of non-Bell equipment.

purposes of implementing the reforms called for by the 1996 Telecommunications Act, although some extensions of that framework are necessary in the context of a firm with market power whose pricing is effectively constrained by regulation. The FCC has previously endorsed the principles in the *Merger Guidelines* in its BOC non-dominance order. The discussion below uses the concepts from the *Merger Guidelines* and the structure-conduct-performance paradigm for assessing the degree of local competition.

49. In unregulated markets, the absence of unilateral market power is generally inferred from either a low (enough) share of total capacity or, even if the firm in question has a high market share, by the demonstrated ability of its competitors to rapidly increase their market shares at prevailing prices. In a regulated market, however, a necessary condition to infer the absence of market power is that the firm's price is below the regulated maximum.³⁴ A firm with market power may, of course, find it profitable to set its price below the regulated maximum levels, but pricing by a monopolist or dominant firm at the maximum allowed by regulation clearly implies the existence of at least some unexploited market power. In that latter case, whatever competition exists is not yet sufficient to replace regulation as the constraining force on the dominant firm's pricing. For example, consider access charges. Access prices far exceed costs,

³⁴We assume that the regulated price is not below the competitive level. If a regulated firm's prices are set below competitive levels by regulators, the market valuation of the firm's assets would be below book levels. This is hardly the case for Ameritech.

by any measure,³⁵ but the BOCs' access prices have consistently been at the regulated ceiling, indicating that if regulation were to be withdrawn, the BOCs would find it profitable to raise prices even further.

50. Whether regulated maximum prices are binding is important for more than just establishing market power. The incentive to cross-subsidize or discriminate against downstream rivals depends importantly on whether competition or regulation is constraining that firm's prices in upstream and/or downstream markets.

51. In evaluating the likely effects of allowing Ameritech into long distance, therefore, a very important question will be whether Ameritech has been pricing consistently below its regulated maximum prices in both downstream and upstream local markets for a significant period of time and can be expected to continue to do so in the future. In downstream retail markets, where the sunk cost of entry through UNEs or resale will be lower and thus entry more likely, pricing below the regulated maximum price for a significant period of time may be sufficient to infer that competition rather than regulation is likely to continue as the constraining force in that market. In the upstream, UNE market, however, where the sunk costs of entry are much larger and entry barriers greater, an inference of continued effective competition requires assurances in terms of both current performance and structure. If Ameritech has consistently been pricing all UNEs at

³⁵Salomon Brothers observed that "switched access priced at \$0.03 per minute is probably one of the highest margin legal businesses in the U.S." See Salomon Brothers, Regional Bell Operating Companies - Opportunities ... While Danger Calls, January 1996, p. 20.

levels below the regulated maximums and its facilities-based competitors at the upstream level have a sufficiently large share of upstream capacity, one can infer that competition will continue to be the constraining force in those upstream markets.

52. Because entry will probably occur far more slowly at the upstream, UNE stage, the state of competition there will determine how long Ameritech will retain market power in the local exchange and the resulting incentive to leverage market power into adjacent markets. But how should regulators determine when sufficient facilities-based entry has occurred to ensure competition has eliminated Ameritech's incentive and ability to engage in anticompetitive behavior? At a minimum, that point will have arrived when regulation of UNE and retail prices is no longer necessary. Any determination that Ameritech's retail and UNE rates should no longer be regulated would best be made by the Michigan Public Utilities Commission. If Ameritech cannot convince its state regulator that profit and rate regulation is superfluous and unnecessary (presumably because any price increase following deregulation would be "insignificant"), a substantial degree of skepticism is warranted that effective competition exists in fact for Ameritech's local exchange services. Regulation is expensive, and a state regulator acting in the interests of consumers and taxpayers should be willing to stop regulating Ameritech's rates and profit levels if it is convinced that competition is now almost as good as regulation in constraining Ameritech's prices at the retail and UNE levels.

53. Under the market share standards generally used in antitrust,³⁶ Ameritech would be presumed to still possess market power, before considering other factors, as long as it retained a market share above about 60-70%. Other factors could alter the presumption in either direction; shares above that level might not convey market power, and market power could still be present with shares below that level. However, the entry barriers raised by the substantial sunk costs associated with entering the local exchange market on a facilities basis strongly suggest that, but for regulation of its retail and UNE prices, Ameritech would be able to exercise substantial market power as long as it retained a large share of upstream capacity.³⁷ Moreover, any presumptions for BOC entry into long distance based on market shares would require that the geographic market was defined correctly.

54. It is clear, however, that the correct geographic markets are far less than statewide in scope. The "local" in local exchange service is not a misnomer: The arena for effective competition with Ameritech is in fact very local. A customer does not yet have an effective competitive alternative unless the competing local carrier can provide retail local exchange

³⁶Regulation may prevent the direct and complete exercise of market power by limiting the firm's prices and profits, but, as we have stressed, this very constraint gives rise to incentives to take the monopoly profits in adjacent, unregulated markets.

³⁷Because we have so little experience with local competition, it is not possible to say now which share measures will be most useful in assessing Ameritech's market power. If it turns out that entrants can quickly convert capacity to sales by slightly undercutting Ameritech's prices, then capacity measures of market share will be more appropriate. If it is very difficult for entrants with capacity to gain sales even if they slightly undercut Ameritech's local prices, then sales-based market share measures will be more appropriate.

services that are a) equivalent in price quality (or in quality-adjusted price) to Ameritech's offering and b) not dependent on Ameritech for any element or service that is essential for providing those final services to that customer on a cost-effective basis. Effective competition thus is assessed on a customer-by-customer basis: just because a customer in city A has meaningful local service alternatives does not imply that another customer in city B halfway across the state has similar alternatives, nor does it imply that the customer in city A has local service alternatives for local termination of calls to city B. Similarly, just because one customer has a meaningful alternative does not mean that other customers a small distance away in the same city also have meaningful alternatives. For example, the sunk costs of extending service from a fiber ring to a building a few hundred feet away from the ring can be substantial,³⁸ in which case service via the fiber ring is not a meaningful alternative for customers very close to, but not on, the ring.

D. The potential for rapid growth of new local competitors cannot now be assumed sufficient to force Ameritech to price its services at competitive rates.

55. The "easy entry" argument posits that the potential for growth by facilities-based competitors is very high, so the de minimus shares of existing local competitors do not imply that Ameritech will retain market power and the ability to discriminate in the near future. In economics jargon, a market where high market shares don't imply market power because of very easy entry is termed a contestable market. Because of the high sunk costs of facilities-based

³⁸See Hatfield Associates, Enduring Local Bottleneck II, April 30, 1997.

entry, or UNE-based entry, the local telecommunications markets are not contestable.³⁹ It is important to understand why.

56. At most, the argument is highly geographically specific. Consider first the case where the entrants' combined market share in one locality is small. For an alternative carrier to be a meaningful alternative to a current customer of Ameritech, that alternative carrier must face at most insignificant customer specific sunk costs to reach additional customers. If in fact actual local competition is limited to a few niches because the competitors face significant sunk costs to expansion, then a regulated bottleneck monopoly remains, and allowing Ameritech to enter long distance would entail substantial risks to competition. Excessively high non-recurring charges for unbundled network elements are a good example of customer specific sunk costs that inefficiently deter entry.

57. Now consider whether effective local competition in city A implies that Ameritech will soon face effective competition in other areas. In essence, Ameritech would be arguing that effective competition in city A implies that rapid expansion is both feasible and likely in other areas in the face of an exercise of market power. In order to reach that conclusion, however, one would have to know either that entrants have sunk or are in the process of sinking the costs necessary to enter the other areas (but do not yet have much market share), or that other markets

³⁹Even economists who often work for the BOCs recognize that "contestability...certainly does not apply to telecommunications." See Jerry Hausman and Timothy Tardiff, Antitrust Bulletin (1995).

are similar in all important respects to the city A, so that profitable entry in city A can be expected to be reproduced elsewhere. However, when local entry occurs in a systematic order (e.g., first in high density areas), entry in one area clearly does not imply that similar entry will occur elsewhere.⁴⁰

58. Problems in obtaining entry at multi-tenant buildings can also impose costs that make it uneconomic for a CLEC to provide service to the building even though it is a "short" distance to the CLEC's network. Because of the possible costs of dealing with more than one local telephone company, building owners may be reluctant to allow a CLEC access equivalent to that of the incumbent LEC to the common telephone spaces in the building. The entry-retarding effects of this natural or cost-based impediment to local entry can be exacerbated by exclusionary contracts between the incumbent LEC and building owners.⁴¹ For example, contracts for exclusive rights of building access for local service marketing will raise the costs of entry. If incumbents are allowed to direct elements of competition between themselves and new entrants to a bidding contest over exclusive rights, the extent of entry will likely be reduced.

59. The Federal Communications Commission should pay close attention to data comparing the rate at which Ameritech can enter into long-distance service with the rate at which local

⁴⁰See the discussion in paragraph 12 and footnote 5, above.

⁴¹See In the Matter of Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, CS Docket No. 96-133 (December 26, 1997), at paragraphs 196-200.

competitors can enter local service with UNEs purchased from Ameritech. Ameritech controls an important feature of both entry scenarios: it processes and implements the changes consumers make in their long-distance carrier, and it also must process and provide orders whereby new local competitors serve their customers in part with unbundled network elements obtained from Ameritech. Right now, those two entry processes would occur at enormously different rates. Ameritech now processes thousands of PIC changes per day in long distance, utilizing well-tested and computerized methods. Ameritech's ability to supply unbundled loops (or other UNEs) to local competitors is nowhere near as well developed. Obviously, if Ameritech can enter long distance at a far faster rate than it permits others to enter local service, it will have an enormous competitive advantage in competing for those customers who, for whatever reason, prefer one-stop shopping. (Other one-stop shopping issues are addressed in detail below.)

E. The risks of premature entry by the BOCs into interLATA long-distance service are far greater than the risks of delaying their entry until local competition is well-established.

60. Ameritech Michigan may argue that it will face a competitive disadvantage in local competition if its local competitors can compete on an integrated basis, while they are denied authority to offer interLATA service. It also may object that the FCC can always rescind its interLATA authority if the Commission later decides that, because of post-entry anticompetitive behavior, Ameritech's provision of interLATA service is not in the public interest. These arguments are related, and both are fallacious.

61. Once Ameritech has been allowed into interLATA long distance, there is good reason to believe that, except for grossly egregious behavior by Ameritech, the decision will not be reversed easily. The FCC will not want to tell customers that they can no longer deal with their chosen vendor, even though that customer preference may be based on discrimination or cross-subsidy. Switching costs will be imposed on customers. The reality is that regulators are likely to view interLATA entry approvals as irreversible, with the removal of authority, once granted, viewed as highly unlikely absent truly egregious behavior.

62. When a decision is irreversible, and there is uncertainty that can be resolved by waiting, then it is optimal to wait for new information so long as the information will resolve some of the uncertainty⁴² and the costs of waiting are low. This applies to public as well as private decisions. Here there are two major sources of uncertainty. The first concerns what terms and conditions will apply to competitors' future purchases of unbundled network elements from Ameritech Michigan and what principles the Michigan regulator will use for determining those terms and conditions.⁴³ The second concerns how well the procedures for purchasing unbundled elements actually work in practice and how much local competition based on these procedures will

⁴²See Avinash Dixit and Robert Pindyck, *Investment Under Uncertainty*, Princeton University Press (1994)

⁴³Ameritech is claiming the right to revisit the pricing of unbundled elements depending on the outcome of the litigation filed by it and other LECs that is now pending in the Eighth Circuit.

develop. These issues can only be resolved by waiting and basing judgments on the actual terms and conditions for the purchase of UNEs, and the actual procedures as they work in practice.

63. Ameritech Michigan cannot argue plausibly that there is a significant social cost to waiting. If it argues that it will take a long time to iron out the details for implementing transactions for unbundled elements, that implies that, for a long time, entrants will be subject to seemingly plausible difficulties and excuses that impede local entry. But the FCC and state regulators are unlikely to impose major penalties on Ameritech Michigan where the behavior that troubles them falls in a gray area. Even where Ameritech Michigan is told to alter its practices, unless the regulator is convinced that its explanations for delays and problems are entirely without merit, the only likely remedy is forward-looking injunctive relief.⁴⁴ This gives Ameritech Michigan a substantial ability and incentive to delay any efficient local entry that depends on its cooperation.⁴⁵

64. The current strategies and investments of many telecommunications companies, including MCI, are premised, in part, on the perceived preferences of some telecommunications consumers for one-stop shopping. To the extent consumers in fact turn out to prefer one-stop shopping, a natural question is the effect of such preferences on the timing of BOC entry into long distance.

⁴⁴This not a mere theoretical prediction. As reported above, Ameritech's only penalty for the repeated rejection of its tariff filings for interconnection and unbundled loops by the Michigan Public Utilities Commission was to be told to refile.

⁴⁵ Imagine if the IRS's worst sanction were to tell tax evaders to go and sin no more.

The BOCs generally suggest that they will be disadvantaged unfairly if their entry into interLATA long distance is delayed after the IXC's begin to provide local service. This argument is without merit. One must consider carefully why there may be a customer preference for one-stop shopping. Consider three possibilities:

1) The consumer wants "one-bill" service. The BOCs have the power today to make one-bill service work for their customers. By pricing their billing services reasonably, BOC local service offerings can remain billed in conjunction with those of the IXC's, and the BOCs should not be inefficiently harmed in local service competition for customers with a preference for receiving only one telecommunications bill. The prices for the BOCs' billing services may have to be reduced, but that merely reflects the beneficial effects of competition on the now excessive prices the BOCs are able to charge for their billing services.

2) A preference for one-stop shopping might be based on various possible discount plans or price structures that encourage bundled purchases of local, long distance, and other services. Such pricing can be efficient. As discussed above in the context of access price reform, however, the major issue here arises if BOCs are permitted to offer long-distance service before access price reform. Then the BOCs can offer various attractive pricing plans (including price plans that bundle long-distance and local services) to all its customers, whereas entrants can only do so for customers they serve with their own switching facilities.⁴⁶ The out-of-pocket costs for a BOC are far lower than the out-of-pocket costs for an IXC because of the large differential in each company's true, private

⁴⁶Delaying Ameritech's entry would give IXC's a pricing advantage only with respect to the small fraction of customers who they will serve with their own switches. Suppose after one additional year of local service competition, 2% of the customers in Ameritech Michigan's territory are served by someone else's local switch. If Ameritech is allowed to offer in-region interLATA service now, it will have a strategic pricing advantage for 98% of the customers. If Ameritech's long-distance entry is delayed, its rivals will have an advantage for only 2% of the customers. In a perfect world, society would not have to accept either inefficiency. However, as long as the Telecommunications Act is interpreted as requiring that the interLATA authority be granted or denied on a state-by-state basis, then, given the choice between the two distortions, there are two reasons to delay Ameritech's entry. First, the distortion associated with delaying BOC entry is far smaller than the distortion associated with permitting entry now. Second, local service is now monopolized, whereas very substantial competition exists in long distance. Thus, encouraging additional local entry is more important to society than allowing immediate additional entry into long distance.

cost of access. Therefore, for all customers who cannot be reached by the IXC's facilities in such a way that allows the IXC to avoid paying access charges to the BOC, the BOC will have a substantial advantage in structuring attractive pricing plans. This advantage creates at least three problems. First, such an advantage could allow an inefficient BOC to succeed in long-distance competition against a more efficient IXC solely because of the differential costs of access. Second, competition among facilities-based providers of one-stop shopping is necessary in order to maximize consumer benefits. If only the BOC provides one-stop shopping, it will keep as profits much of the consumers' perceived benefit for one-stop shopping. Those profits can only be competed away when substantial facilities-based entry occurs. Third, to retain the competitive advantage against other long-distance carriers it gains from being solely able to more efficiently price bundled services, the BOC's incentives to restrict the development of local competition are increased, since the BOC is now the incumbent "first-mover" in both local and bundled services. Facilities-based local competition attacks both incumbencies.

3) A market preference for one-stop shopping might evolve to reduce "finger pointing" among multiple suppliers over service, maintenance, etc. This is a "Williamsonian" transaction cost argument,⁴⁷ and it is based on a failure of third parties (such as courts or regulators) to efficiently resolve contractual disputes. Given contractual failure, vertical integration occurs. But the BOCs can't have it both ways. They argue that regulation will work very well and, therefore, they will not be able to discriminate in service quality, maintenance, etc. This presumes that either the courts or regulators will efficiently administer the "contracts" governing the sale of inputs by the BOCs to their local competitors and to their long-distance customers. If these contracts are efficiently enforced, this reason for vertical integration is not present.⁴⁸ If the transactions costs advantage of vertical integration is real,⁴⁹ then the BOCs' arguments

⁴⁷See Oliver Williamson, Markets and Hierarchies: Analysis and Antitrust Implications, New York: The Free Press (1975).

⁴⁸Consumers may want a single point of contact for their telecommunications needs. If contracts work well, that point of contact need not be vertically integrated. In principle, either Ameritech or an unintegrated IXC could be the single point of contact and provide bundled service to their customers. The IXC would assemble its bundle by contract. However, if contracts don't work well, then customers only get efficient service from suppliers who are vertically integrated on a facilities basis.

⁴⁹We do not suggest that vertical integration is necessarily efficient even if the transactions costs economies are real. One reason why consumers might prefer an integrated seller is if they know that, due to pervasive discrimination by a vertically integrated input monopolist, all unintegrated sellers offer inferior service. One solution to that problem is to ban vertical

about efficient regulation are incorrect. And it will then be the competing IXCs and their customers, and not the BOC, who would suffer the competitive disadvantage if BOCs can provide interLATA service before facilities-based local competition is widely established.

65. In fact, it is the BOCs who will have major advantages in competing for customers who prefer to purchase a bundle of services if Ameritech is allowed into long-distance service before meaningful local competition develops. Ameritech will be able to take advantage of a very well functioning wholesale market for long-distance capacity to offer immediately a bundle of services to its customers. It will not need the cooperation of any particular IXC to serve such customers. In contrast, of course, MCI's ability to offer a bundle of local and long-distance services in Michigan will, for the near term, be almost entirely dependent on the nature of the cooperation for both local and long-distance services that it receives from Ameritech. With interLATA entry now, Ameritech will be the sole provider of the bundled local long-distance service and we should expect that bundle to be sold at the monopoly price.

V. THERE IS NOW VIRTUALLY NO LOCAL COMPETITION IN MICHIGAN.

66. Ameritech's Section 271 application provides some sketchy details on the current degree of competition in local exchange markets in Michigan. Ameritech, and in particular Harris and Teece, argue that the current level of competition is sufficient to allow Ameritech to begin offering interLATA service. Harris and Teece argue that the statements of AT&T, MCI, and

integration by the input monopolist. This removes the anticompetitive motivation for the monopolist to discriminate among downstream firms.

others about their plans for local service indicate that there will soon be an enormous increase in local competition.

67. Much of the purportedly planned entry into local telephone service cited by Harris and Teece is entry by resale, which, as we indicated, does nothing to alleviate Ameritech's control of bottleneck facilities. This is especially the case for AT&T's much-noted goal of a one-third share of local telephone service in a few years. Any additional entry into local exchange markets will be largely through purchase of unbundled elements. We have already indicated, contrary to Harris and Teece, that even competition based on unbundled elements still leaves competitors subject to discrimination and, in particular, to the withholding of necessary cooperation by Ameritech. An unknown, but presumably small, amount of future competition based on unbundled elements is a fragile basis for concluding that Ameritech currently has no incentive or ability to suppress competition in local exchange markets and to discriminate against competing long-distance carriers once it is allowed into long distance. For the prospects of such competition to imply anything about the prospects for actual facilities-based competition, the next step of the argument must be addressed. As a starting point, the section 271 checklist items must be fully implemented,⁵⁰ so the FCC can examine the terms and conditions (including how well they have actually worked in practice) and address the issue of how quickly a company can justify and make the investments necessary to begin serving (former resale) local service customers with its own

⁵⁰That is, full implementation of the checklist is a necessary but not sufficient condition for interLATA 271 authority.

facilities. At least at low volumes, there are significant scale economies for local transport and switching. Thus, significant resale-based entry will often be necessary before an entrant can justify extensive investment in such facilities.

68. Harris and Teece are silent on the issue of how quickly facilities-based competition can be expected to develop. However, it is clear that local competition is virtually nonexistent, even after several years of entry experience prior to the 1996 Act as part of Michigan's local service experiment. MCI's current data on the termination of long-distance calls shows that competition to incumbent LECs from CLECs in Michigan is now virtually nonexistent. In April 1997, MCI terminated only 0.3% of its Michigan long-distance minutes to the CLECS; the balance was terminated to ILECs.⁵¹ The information provided by Harris and Teece (p. 28) paints much the same picture on local competition in Michigan. They focus on various measures of growth rates, but growth rates can be very high when one starts near zero. They fail to mention that their own data shows that local competitors (including competitors who are purchasing loops from Ameritech) still serve only about one per cent of Michigan's local exchange customers.⁵²

⁵¹490,000 minutes out of 165,000,000 minutes were terminated to CLECs.

⁵² Harris and Teece attribute 45,480 on-net loops to the CLECs (p. 47, Table III-6.), and they report that the CLECs' unbundled loops procured from Ameritech are about 21,300 (p. 28, Table III-1). This sum is 66,780. Ameritech serves over 5 million switched access lines in Michigan, and between 5.5 and 6 million total access lines.

69. Harris and Teece (pp. 24-27) also stress the high rate of growth (over 400 per cent increase over the past year) in Ameritech Michigan's provisioning of unbundled loops to competitors (who use their own facilities for the other elements). Ameritech's application is silent on how to interpret these results. At the end of 1996, Ameritech was providing new unbundled loops at a rate of about 2000 per month. In early 1997, the rate fell to about 1000 per month. If Ameritech continues to provide no more than 2000 unbundled loops per month, then this "competition" will never amount to much. The annual increase in local loops served in Michigan is far more than 24,000 per year.⁵³ Nor does Ameritech Michigan's 271 application provides any factual basis supporting the Harris-Teece implied proposition that Ameritech is set up to continue expanding the availability of unbundled loops to its local competitors at anything like these growth rates. What is clear is that currently less than one-half of one percent of Ameritech's loops have been sold on an unbundled basis to competing local carriers.

70. Harris and Teece (pp. 29-42) also attempt to assess the "addressable market" that CLECs will soon be able to reach either through collocation at Ameritech's switches or by expanding from their own existing facilities. They indicate that by July 1997, CLECs will have collocated at offices accounting for 34% of Ameritech Michigan's access lines and 32% of its revenue. However, Harris and Teece's data indicate that the expected in-service capacity of the collocated facilities will account for only about 6% of Ameritech's total lines. In addition, collocating

⁵³According to Table 2.10 in the 1993, 1994, and 1995 editions of the FCC's *Statistics Communications Common Carriers*, Ameritech's total access lines grew by 521,629 in 1994 and 202,342 in 1995.